



FEATURES

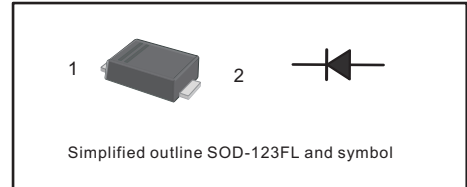
- For surface mounted applications
- Glass Passivated Chip Junction
- Fast reverse recovery time
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: SOD-123FL
- Approx. Weight:15mg/0.00053oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings at 25 °C

Parameter	Symbols	BAV100WL	BAV101WL	BAV102WL	BAV103WL	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	60	120	200	250	V
Maximum RMS voltage	V_{RMS}	50	100	150	200	V
Continuous Forward Current	I_F	250				mA
Repetitive Peak Forward Current	I_{FRM}	625				mA
Non-reptitive Peak Forward Surge Current at 1s at 1ms at 1 us	I_{FSM}	1 3 9				A
Total Power Dissipation	P_{tot}	500				mW
Typical Thermal Resistance ⁽¹⁾	$R_{\theta JA}$	450				°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150				°C

(1) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Characteristics at $T_a = 25\text{ °C}$

Parameter	Symbols	BAV100WL	BAV101WL	BAV102WL	BAV103WL	Units
Reverse Breakdown Voltage at $I_R=100\mu A$	$V_{(BR)R}$	60	120	200	250	V
Maximum Forward Voltage at 100 m A at 200 m A	V_F	1.00 1.25				V
Maximum DC Reverse Current $T_a = 25\text{ °C}$ at Rated DC Blocking Voltage $T_a = 100\text{ °C}$	I_R	0.1 15				μA
Typical Junction Capacitance at $V_R=4V$, $f=1MHz$	C_j	5				pF
Maximum Reverse Recovery Time	t_{rr}	50				ns



Fig.1 Forward Current Derating Curve

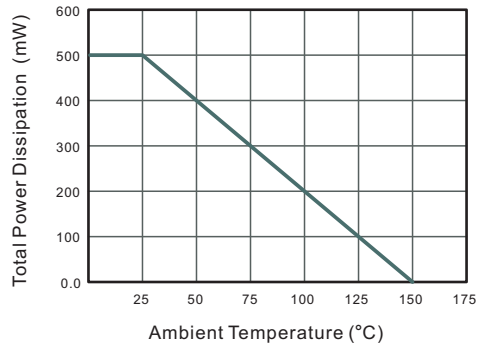


Fig.2 Typical Reverse Characteristics

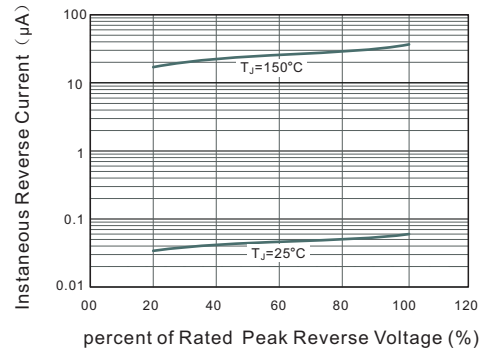


Fig.3 Typical Instaneous Forward Characteristics

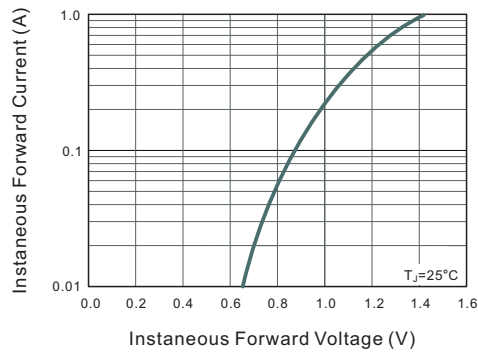
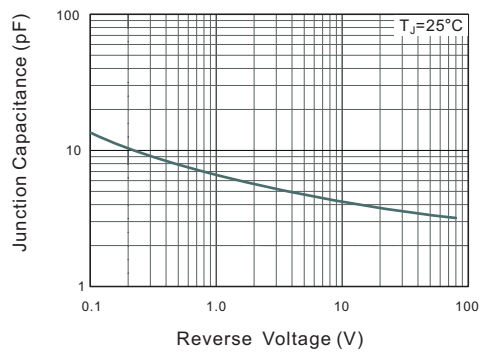


Fig.4 Typical Junction Capacitance

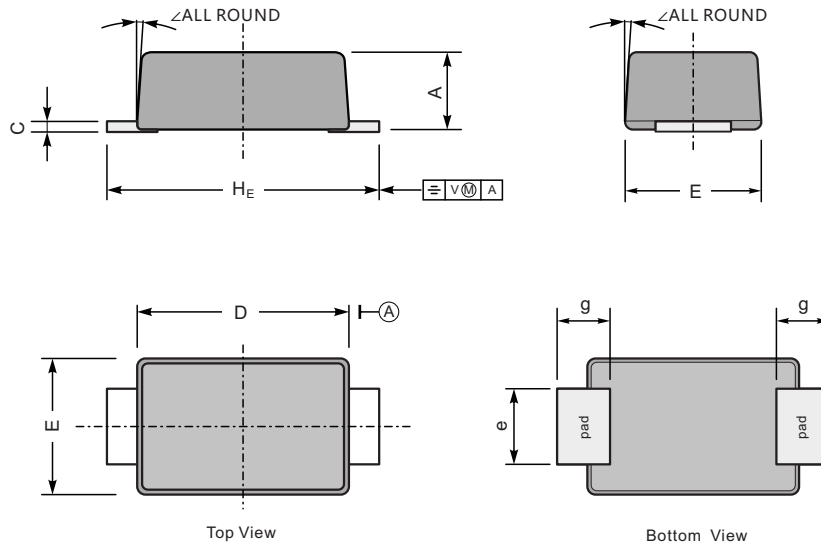




PACKAGE OUTLINE

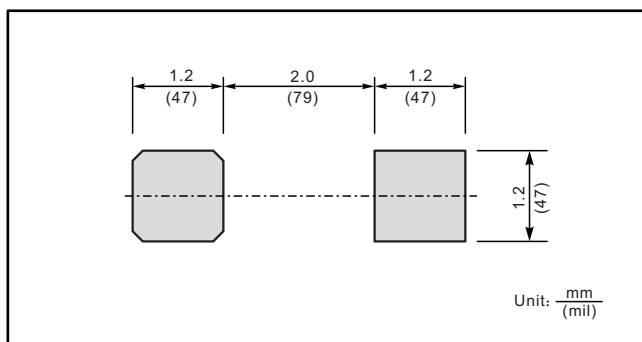
Plastic surface mounted package; 2 leads

SOD-123FL



UNIT		A	C	D	E	e	g	H _E	$\angle$
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

The recommended mounting pad size



Marking

Type number	Marking code
BAV100WL	B100
BAV101WL	B101
BAV102WL	B102
BAV103WL	B103